

AMENDMENTS TO THE CLAIMS

Claim 1 (presently amended)

A method of establishing an electrical connection between at least one connecting piece (9) of a workpiece (11) and at least one wire (6) comprising:

- preparing an end of the at least wire (6) with a contact piece (1) matched to the connecting piece (9),
- positioning the contact piece (1) on the connecting piece (9); and
- welding the contact piece (1) to the connecting piece ~~(6)~~ (9) by laser radiation.

Claim 2 (previously presented)

The method of claim 1 wherein the contact piece (1) is pressed onto the wire end.

Claim 3 (previously presented)

The method of claim 2 wherein the contact piece (1) is plugged onto the connecting piece (9) for the positioning.

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Claim 4 (cancelled)

Claim 5 (previously presented)

The method of claim 1 wherein the dimensions of the contact piece (1) are chosen so that the contact piece (1) is prevented from sliding off the connecting piece (9).

Claim 6 (previously presented)

The method of claim 1 wherein, prior to the laser welding, the positioning of the contact piece on the connecting piece (9) is monitored.

Claim 7 (previously presented)

The method of claim 1 wherein each workpiece (11) has at least two connecting pieces (9) and one wire (6) is connected to each connecting piece (9).

Claim 8 (previously presented)

The method of claim 7 wherein the connection of the at least two wires (6) to the at least two connecting pieces (9) is performed simultaneously.

Claim 9 (previously presented)

The method of claim 7 wherein the wires (6) are arranged parallel to the line of alignment of the at least two connecting pieces (9) and at least one of the contact pieces (1) is bent so that the wires (6) extend parallel adjacent each other after the positioning of the contact pieces (1) on the connecting pieces (9).

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Claim 10 (previously presented)

The method of claim 7 wherein, prior to laser welding, the assignment of the wires (6) to the connecting pieces (9) is monitored.

Claim 11 (previously presented)

The method of claim 2 including the additional step of encapsulating the workpiece (11) after the laser welding.

Claim 12 (previously presented)

The method of claim 2 wherein all the steps are performed by computer-control in a fully automatic manner.

Claims 13 to 21 (cancelled)

Claim 22 (withdrawn)

An apparatus for carrying out the method of claim 1, comprising:

a component inserting station (24) for positioning prepared wires (6) on the connecting pieces (9) of workpieces(11), a laser welding station (28) for welding the ends of the prepared wires (6) to connecting pieces (9), and a transport system (22) for conveying the workpiece (11).

Claim 23 (withdrawn)

An apparatus of claim 22 wherein the component inserting section (24) is preceded by a preparation station for preparing the wires (6) by attaching contact pieces (1).



Claim 24 (withdrawn)

An apparatus 22 wherein a potting station (30) is additionally provided for potting the workpieces (11) after the laser welding.

Claim 25 (withdrawn)

An apparatus of claim 22 wherein between the component inserting station (24) and the laser welding station (28), a station for component insertion monitoring (26) is also provided and/or following the potting station (30), a station for production control (32) is provided.

Claim 26 (withdrawn)

An apparatus of claim 22 comprising a component withdrawal station (36).

Claim 27 (withdrawn)

An apparatus of claim 22 comprising a control means for fully automatic control of the apparatus.

E1 Concluded
